

YEARS OF POTENTIAL LIFE LOST, AGE-ADJUSTED YEARS OF POTENTIAL LIFE LOST AND AVERAGE YEARS OF LIFE LOST

Years of Potential Life Lost (YPLL) is a measure of premature mortality and provides a more accurate measure of deaths among younger age groups while death rates measure disease burden among older persons

YPLL is measured using a cut-off of 75 years. A person dying at age 35 would have 40 years of life lost. Lost productivity due to an individual dying prematurely of cancer involves both economic and non-economic societal (human) costs.

Heart disease was the leading cause of years of potential life lost in the United States in 1980 with 2,238.7 years and cancer was 2,108.8 years per 100,000 persons. However, cancer took over a decade later and in 2003, the age-adjusted YPLL was 1,586.9 years for cancer and 1,187.9 per 100,000 persons for heart disease.¹

South Dakota's AAYPLL was 1,464.9 for 2003, less than the national rate.

YPLL without age-adjusting showed 11,342 years for cancer with 10,596 years for whites and 731 years for American Indians. Lung and bronchus cancers lead with 2,118 YPLL₇₅ for whites and 88.5 years for American Indians (Figures 1).

Age-adjusting YPLL (AAYPLL) allows a better comparison of the effects of early deaths among populations as it is a rate per 100,000 persons. Table 1 shows that American Indians had a higher AAYPLL than whites even though the absolute number of deaths among whites were 18 times the number of American Indians

Average Years of Life Lost (AYLL) is the number of YPLL divided by the number of deaths. Childhood cancers will always lead because of very premature deaths. Overall, whites lost 14 years and American Indians lost 17 years. Hodgkin Lymphoma lead for whites with 36 years lost and cervix uteri lead for American Indians at 30.5 average years of life lost (Figure 2).

Age-adjusting YPLL (AAYPLL)

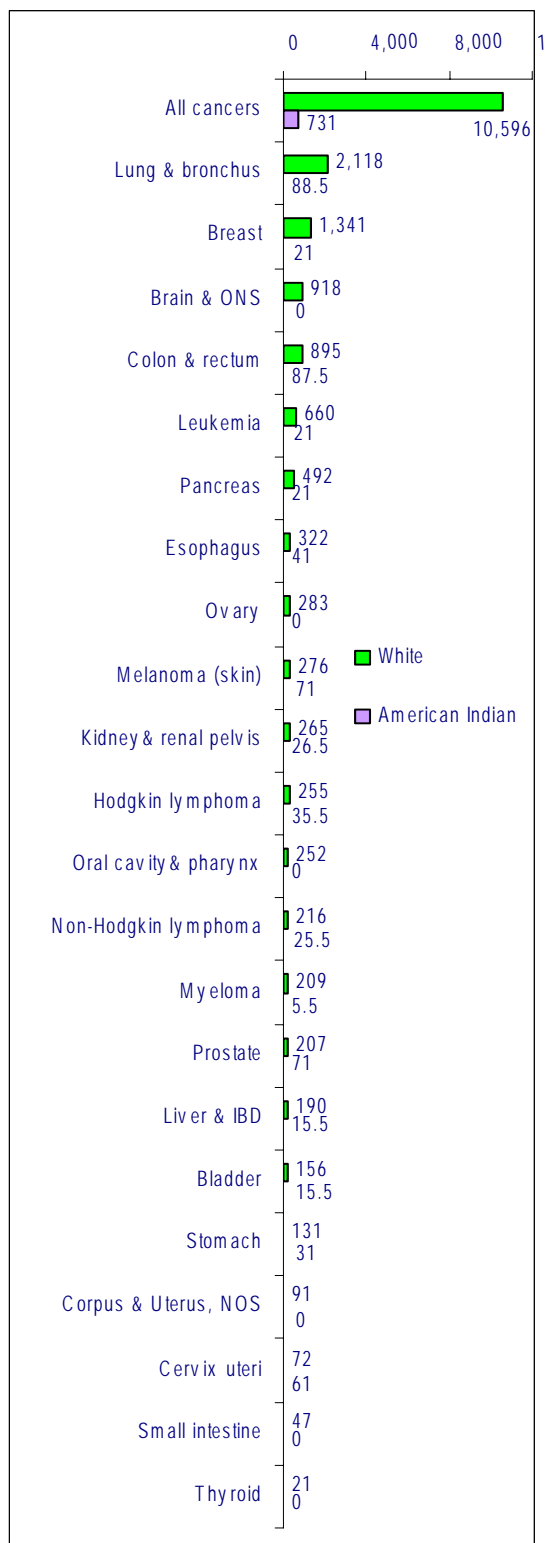
Table 14 : YPLL₇₅, AAYPLL and AYLL₇₅, all cancers, South Dakota 2003

	# of deaths ¹	YPLL ₇₅	AAYPLL ²	AYLL ₇₅
Total	804	11,342	1,464	14
Males	422	5,747	1,519	14
Females	382	2,295	1,438	15
Whites	761	10,596	1,472	14
American Indians/ Pacific Islander (PI)	42	731	1,684	17

² Age-adjusted YPLL per 100,000 persons

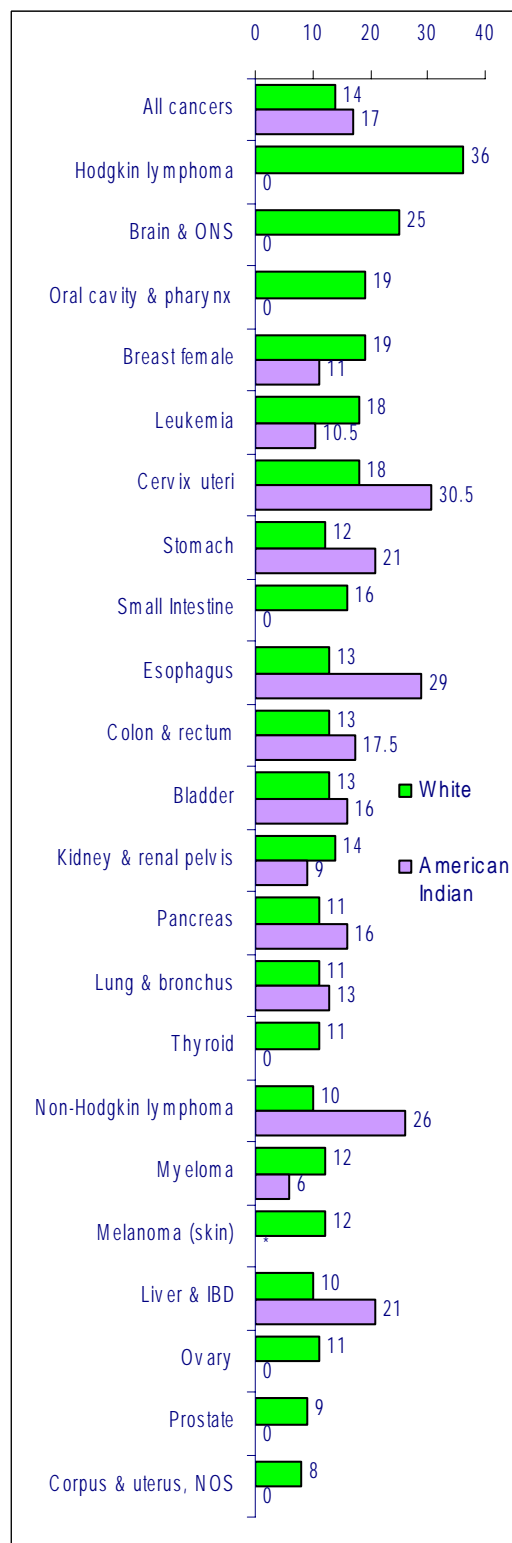
¹ Health, United States 2006

Figure 24: Years of potential life lost by race and selected cancer sites, South Dakota 2003



Source: South Dakota Department of Health

Figure 25: Average years of life lost by race and selected cancer sites, South Dakota 2003



Source: South Dakota Department of Health